

Project:

FMC RCRA

Pace Project No.: 10316268

Sample: 507156	Lab ID: 1	0316268017	Collecte	d: 07/30/1	5 12:40	Received: 07/	31/15 10:00 Ma	atrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical M	lethod: EPA 6	010 Prepa	ration Meth	od: EPA	\ 3010			
Cadmium Potassium	0.0045 1210	mg/L mg/L	0.0030 25.0	0.00065 1.3	1 10	08/02/15 15:28 08/02/15 15:28	08/06/15 18:26 08/10/15 09:22		
6020 MET ICPMS	Analytical M	lethod: EPA 6	020 Prepa	ration Meth	od: EPA	3020			
Arsenic Selenium	0.14 0.00023Ú -	mg/L mg/L	0.00050 0.00050	0.00011 0.00020	1 1	08/02/15 15:41 08/02/15 15:41	08/07/15 17:45 08/07/15 17:45		
SM4500F-C Fluoride	Analytical M	lethod: SM 4	500F/C						
Fluoride	0.12(J)	mg/L	1.0	0.051	1		08/08/15 14:24	16984-48-8	
300.0 IC Anions	Analytical M	lethod: EPA 3	300.0						
Chloride Fluoride Nitrate as N Sulfate	345 \( \frac{1}{41.6} \) ND \( \frac{1}{42.6} \) 249	mg/L	6.0 2.5 0.10 6.0	3.0 0.18 0.050 3.0	5 50 1 5		08/01/15 01:31 08/01/15 08:49 07/31/15 18:04 08/01/15 01:31	to be men men me	
350.1 Ammonia	Analytical M	lethod: EPA 3	350.1						
Nitrogen, Ammonia	9.8	mg/L	0.40	0.20	10		08/12/15 18:18	7664-41-7	
Phosphate, Ortho Low Level	Analytical M	lethod: SM 4	500-P E						
Orthophosphate as P	181	mg/L	12.5	4.4	2500		07/31/15 17:16		



Project:

FMC RCRA

Pace Project No.:

Sample: 507157 A,B,C	Lab ID: 1	0316268019	Collecte	d: 07/30/1	5 13:30	Received: 07/	31/15 10:00 Ma	atrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical M	lethod: EPA 6	010 Prepa	ration Meth	od: EPA	A 3010			
Cadmium Potassium	0.0028 <u>Ú</u> ) 299	mg/L mg/L	0.0030 2.5	0.00065 0.13	1 1	08/02/15 15:28 08/02/15 15:28	08/06/15 18:45 08/10/15 09:38	7440-43-9 7440-09-7	M1
6020 MET ICPMS	Analytical M	1ethod: EPA 6	020 Prepa	ration Meth	od: EPA	A 3020			
Arsenic Selenium	0.090 ND J-	mg/L mg/L	0.00050 0.00050	0.00011 0.00020	1 1	08/02/15 15:41 08/02/15 15:41	08/07/15 18:31 08/07/15 18:31		
SM4500F-C Fluoride	Analytical M	lethod: SM 4	500F/C						
Fluoride	0.27(1)	mg/L	1.0	0.051	1		08/08/15 14:59	16984-48-8	
300.0 IC Anions	Analytical M	1ethod: EPA	300.0						
Chloride Fluoride Nitrate as N Sulfate	241 (1) (27.6 1) ND (1) 303	mg/L mg/L mg/L mg/L	6.0 5.0 0.10 6.0	3.0 0.36 0.050 3.0	5 100 1 5		07/31/15 21:06 07/31/15 21:51 07/31/15 15:18 07/31/15 21:06		M1 M1 M1
350.1 Ammonia	Analytical M	fethod: EPA	350.1						
Nitrogen, Ammonia	2.3	mg/L	0.080	0.040	2		08/12/15 17:19	7664-41-7	
Phosphate, Ortho Low Level	Analytical M	lethod: SM 4	500-P E						
Orthophosphate as P	44.2	mg/L	2.5	0.87	500		07/31/15 17:10		

07/31/15 16:59



# **ANALYTICAL RESULTS**

Project:

FMC RCRA

Pace Project No.:

Orthophosphate as P

10316268

1 400 1 10/000 140 100 10200									
Sample: 507158	Lab ID: 1	0316268010	Collecte	d: 07/29/1	5 19:05	Received: 07/	31/15 10:00 Ma	atrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical N	Method: EPA 6	010 Prepa	ration Meth	od: EPA	3010			
Cadmium Potassium	ND <b>20.6</b>	mg/L mg/L	0.0030 2.5	0.00065 0.13	1 1	08/02/15 15:28 08/02/15 15:28	08/06/15 17:13 08/04/15 23:03		
6020 MET ICPMS	Analytical N	flethod: EPA 6	020 Prepa	ration Meth	od: EPA	3020			
Arsenic Selenium	0.012 0.0048	mg/L mg/L	0.00050 0.00050	0.00011 0.00020	1 1	08/02/15 15:41 08/02/15 15:41	08/07/15 17:04 08/07/15 17:04		
300.0 IC Anions	Analytical N	Method: EPA 3	0.00						
Chloride Fluoride Nitrate as N Sulfate	105 T 0.16 T 3.0 T 578	mg/L	12.0 0.050 0.10 12.0	6.0 0.0036 0.050 6.0	10 1 1 10		07/31/15 23:46 07/31/15 16:03 07/31/15 16:03 07/31/15 23:46	16984-48-8 14797-55-8	
350.1 Ammonia	Analytical N	Method: EPA 3	350.1						
Nitrogen, Ammonia	ND	mg/L	0.040	0.020	1		08/12/15 15:52	7664-41-7	
Phosphate, Ortho Low Level	Analytical N	/lethod: SM 4	500-P E						

0.0050

0.10

mg/L

0.0017

# REPORT OF LABORATORY ANALYSIS



Project:

FMC RCRA

Pace Project No.:

10316268

Sample: 507165	Lab ID: 1	0316268008	Collecte	d: 07/29/1	77:40	Received: 07/	31/15 10:00 Ma	atrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical M	lethod: EPA 6	010 Prepa	ration Meth	od: EPA	3010			
Cadmium Potassium	ND <b>13.2</b>	mg/L mg/L	0.0030 2.5	0.00065 0.13	1 1	08/02/15 15:28 08/02/15 15:28	08/06/15 17:00 08/04/15 22:50		
6020 MET ICPMS	Analytical M	lethod: EPA 6	020 Prepa	ration Meth	od: EPA	3020			
Arsenic Selenium	0.023 0.0064	mg/L mg/L	0.00050 0.00050	0.00011 0.00020	1 1	08/02/15 15:41 08/02/15 15:41	08/07/15 16:55 08/07/15 16:55		
300.0 IC Anions	Analytical M	Method: EPA 3	0.00						
Chloride Fluoride Nitrate as N Sulfate	310 5 0.21 2 4.9 5 193	mg/L mg/L mg/L mg/L	6.0 0.050 0.10 6.0	3.0 0.0036 0.050 3.0	5 1 1 5		07/31/15 22:39 07/31/15 15:33 07/31/15 15:33 07/31/15 22:39	16984-48-8 14797-55-8	
350.1 Ammonia	Analytical M	fethod: EPA 3	50.1						
Nitrogen, Ammonia	ND	mg/L	0.040	0.020	1		08/12/15 15:50	7664-41-7	
Phosphate, Ortho Low Level	Analytical M	Method: SM 45	500-P E						
Orthophosphate as P	0.28	mg/L	0.050	0.017	10		07/31/15 16:57		



Project:

FMC RCRA

Pace Project No.:

10316268

Sample: 507166	Lab ID: 1	0316268002	Collecte	d: 07/29/1	12:40	Received: 07/	30/15 10:00 Ma	atrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical M	lethod: EPA 6	010 Prepa	ration Meth	od: EPA	A 3010			
Cadmium Potassium	0.00096Ú) + 45.7	mg/L $V$	0.0030 2.5	0.00065 0.13	1 1	08/01/15 14:53 08/01/15 14:53	08/03/15 01:22 08/03/15 01:22		
6020 MET ICPMS	Analytical M	lethod: EPA 6	020 Prepa	ration Meth	od: EPA	A 3020			
Arsenic Selenium	0.018 0.0057	mg/L mg/L	0.00050 0.00050	0.00011 0.00020	1 1	08/01/15 14:37 08/01/15 14:37	08/07/15 03:43 08/07/15 03:43	The second second second	
300.0 IC Anions	Analytical M	lethod: EPA 3	0.00						
Chloride Fluoride Nitrate as N Sulfate	257 \\ 0.67.1 \\ 43.4 \\ 237	mg/L mg/L mg/L mg/L	24.0 0.050 2.0 24.0	12.0 0.0036 1.0 12.0	20 1 20 20		07/30/15 23:09 07/30/15 20:48 07/30/15 23:09 07/30/15 23:09		
350.1 Ammonia	Analytical M	lethod: EPA 3	50.1						
Nitrogen, Ammonia	ND	mg/L	0.040	0.020	1		08/10/15 10:22	7664-41-7	
Phosphate, Ortho Low Level	Analytical M	lethod: SM 4	500-P E						
Orthophosphate as P	0.31	mg/L	0.010	0.0035	2		07/30/15 16:32		

10316268



Project:

FMC RCRA

5.5

mg/L

Pace Project No.:

Orthophosphate as P

10316268

Sample: 507167	Lab ID: 1	0316268009	Collecte	d: 07/29/1	5 18:20	Received: 07/	31/15 10:00 Ma	atrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical M	Method: EPA 6	010 Prepa	ration Meth	od: EPA	3010			
Cadmium Potassium	0.00090 <b>Ú</b> ) 13.1	mg/L mg/L	0.0030 2.5	0.00065 0.13	1 1	08/02/15 15:28 08/02/15 15:28	08/06/15 17:07 08/04/15 22:56		
6020 MET ICPMS	Analytical M	Method: EPA 6	020 Prepa	ration Meth	od: EPA	A 3020			
Arsenic Selenium	0.044 0.0019	mg/L mg/L	0.00050 0.00050	0.00011 0.00020	1 1	08/02/15 15:41 08/02/15 15:41	08/07/15 16:59 08/07/15 16:59		
300.0 IC Anions	Analytical N	Method: EPA 3	0.00						
Chloride Fluoride Nitrate as N Sulfate	142 J 0.93 2 0.0610) 149	mg/L mg/L mg/L mg/L	2.4 0.050 0.10 2.4	1.2 0.0036 0.050 1.2	2 1 1 2		07/31/15 22:58 07/31/15 15:48 07/31/15 15:48 07/31/15 22:58	14797-55-8	
350.1 Ammonia	Analytical N	Method: EPA 3	50.1						
Nitrogen, Ammonia	ND	mg/L	0.040	0.020	1		08/12/15 15:51	7664-41-7	
Phosphate, Ortho Low Level	Analytical N	Method: SM 45	500-P E						

0.50

0.17 100

07/31/15 16:58



Project:

FMC RCRA

Pace Project No.:

Sample: 507168	Lab ID: 1	0316268004	Collecte	d: 07/29/15	14:50	Received: 07/	30/15 10:00 Ma	atrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Ånalyzed	CAS No.	Qual
6010 MET ICP	Analytical M	lethod: EPA 6	010 Prepa	ration Meth	od: EPA	3010			
Cadmium Potassium	0.0010① + 25.0	mg/L <sup>[]</sup> mg/L	0.0030 2.5	0.00065 0.13	1 1	08/01/15 14:53 08/01/15 14:53	08/03/15 01:33 08/03/15 01:33		
6020 MET ICPMS	Analytical M	lethod: EPA 6	020 Prepa	ration Meth	od: EPA	3020			
Arsenic Selenium	0.022 0.064	mg/L mg/L	0.00050 0.00050	0.00011 0.00020	1 1	08/01/15 14:37 08/01/15 14:37	08/07/15 03:52 08/07/15 03:52		
300.0 IC Anions	Analytical M	1ethod: EPA 3	0.00						
Chloride Fluoride Nitrate as N Sulfate	53.9 \$\frac{3.7}{22.3}\$\frac{1}{22.3}\$	mg/L mg/L mg/L mg/L	1.2 0.050 1.0 24.0	0.60 0.0036 0.50 12.0	1 1 10 20		07/30/15 21:49 07/30/15 21:49 07/30/15 23:27 07/31/15 04:42		
350.1 Ammonia	Analytical M	1ethod: EPA 3	50.1						
Nitrogen, Ammonia	0.44	mg/L	0.040	0.020	1		08/10/15 10:25	7664-41-7	
Phosphate, Ortho Low Level	Analytical M	lethod: SM 45	500-P E						
Orthophosphate as P	0.11	mg/L	0.0050	0.0017	1		07/30/15 16:22		

08/12/15 15:53 7664-41-7

07/31/15 17:00



## **ANALYTICAL RESULTS**

Project:

FMC RCRA

Pace Project No.:

Nitrogen, Ammonia

Orthophosphate as P

Phosphate, Ortho Low Level

10316268

ND

0.070

mg/L

Analytical Method: SM 4500-P E

mg/L

Sample: 507183	Lab ID: 1	10316268011	Collected	d: 07/30/1	5 08:05	Received: 07/	31/15 10:00 Ma	atrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical N	/lethod: EPA 6	010 Prepa	ration Meth	od: EPA	3010			
Cadmium	ND	mg/L	0.0030	0.00065	1	08/02/15 15:28	08/06/15 17:20		
Potassium	13.5	mg/L	2.5	0.13	1	08/02/15 15:28	08/04/15 23:09	7440-09-7	
6020 MET ICPMS	Analytical N	/lethod: EPA 6	020 Prepa	ration Meth	od: EPA	3020			
Arsenic	0.015	mg/L	0.00050	0.00011	1	08/02/15 15:41	08/07/15 17:08	7440-38-2	
Selenium	0.0043	mg/L	0.00050	0.00020	1	08/02/15 15:41	08/07/15 17:08	7782-49-2	
300.0 IC Anions	Analytical N	Method: EPA 3	0.00						
Chloride	103 T	mg/L	6.0	3.0	5		08/01/15 00:03	16887-00-6	
Fluoride	0.32	mg/L	0.050	0.0036	1		07/31/15 16:18	16984-48-8	
Nitrate as N	1.84	mg/L	0.10	0.050	1		07/31/15 16:18	14797-55-8	
Sulfate	215	mg/L	6.0	3.0	5		08/01/15 00:03	14808-79-8	
350.1 Ammonia	Analytical N	/lethod: EPA 3	50.1						

0.040

0.0050

0.020

0.0017

1

1



Project:

FMC RCRA

Pace Project No.:

Sample: 507601	Lab ID: 1	10316268018	Collected	: 07/30/1	5 13:05	Received: 07/	31/15 10:00 Ma	atrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical M	Method: EPA 6	010 Prepar	ation Meth	od: EPA	3010			
Cadmium Potassium	0.0048 1240	mg/L mg/L	0.0030 25.0	0.00065 1.3	1 10	08/02/15 15:28 08/02/15 15:28	08/06/15 18:32 08/10/15 09:27		
6020 MET ICPMS	Analytical N	/lethod: EPA 6	020 Prepar	ation Meth	od: EPA	3020			
Arsenic Selenium	0.14 0.00028Ú)	mg/L mg/L	0.00050 0.00050	0.00011 0.00020	1 1	08/02/15 15:41 08/02/15 15:41	08/07/15 18:23 08/07/15 18:23		
SM4500F-C Fluoride	Analytical N	/lethod: SM 4	500F/C						
Fluoride	0.10①	mg/L	1.0	0.051	1		08/08/15 14:34	16984-48-8	
300.0 IC Anions	Analytical N	Method: EPA 3	0.00						
Chloride Fluoride Nitrate as N Sulfate	344 T 41:8 ND 248	mg/L mg/L mg/L mg/L	6.0 2.5 0.10 6.0	3.0 0.18 0.050 3.0	5 50 1 5		08/01/15 02:06 08/01/15 09:07 07/31/15 18:19 08/01/15 02:06		
350.1 Ammonia	Analytical N	Method: EPA 3	350.1						
Nitrogen, Ammonia	9.9	mg/L	0.40	0.20	10		08/12/15 18:18	7664-41-7	
Phosphate, Ortho Low Level	Analytical N	Method: SM 4	500-P E						
Orthophosphate as P	190	mg/L	12.5	4.4	2500		07/31/15 17:16		



Project:

FMC RCRA

Pace Project No.:

10316268

Sample: 507701	Lab ID:	10316268006	Collecte	d: 07/29/1	5 15:40	Received: 07/	30/15 10:00 Ma	atrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical	Method: EPA 6	010 Prepa	ration Meth	od: EPA	3010			
Cadmium Potassium	ND <b>0.14(</b> )	mg/L mg/L	0.0030 2.5	0.00065 0.13	1 1	08/01/15 14:53 08/01/15 14:53	08/03/15 01:43 08/03/15 01:43		
6020 MET ICPMS	~	Method: EPA 6			od: EPA				
Arsenic Selenium	ND ND	mg/L mg/L	0.00050 0.00050	0.00011 0.00020	1 1	08/01/15 14:37 08/01/15 14:37	08/07/15 04:01 08/07/15 04:01	7440-38-2 7782-49-2	
300.0 IC Anions	Analytical	Method: EPA 3	0.00						
Chloride Fluoride Nitrate as N Sulfate	ND ND ND ND	mg/L mg/L mg/L mg/L	1.2 0.050 0.10 1.2	0.60 0.0036 0.050 0.60	1 1 1		07/30/15 22:19 07/30/15 22:19 07/30/15 22:19 07/30/15 22:19	16984-48-8 14797-55-8	
350.1 Ammonia	Analytical	Method: EPA 3	50.1						
Nitrogen, Ammonia	ND	mg/L	0.040	0.020	1		08/10/15 10:29	7664-41-7	
Phosphate, Ortho Low Level	Analytical	Method: SM 45	500-P E						
Orthophosphate as P	ND	mg/L	0.0050	0.0017	1		07/30/15 16:24		

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Project:

FMC RCRA

Pace Project No.:

10316268

Sample: 507BTS	Lab ID:	10316268020	Collecte	d: 07/30/1	5 14:00	Received: 07/	31/15 10:00 Ma	atrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical	Method: EPA 6	010 Prepa	ration Meth	od: EPA	A 3010			
Cadmium Potassium	ND 6.8	mg/L mg/L	0.0030 2.5	0.00065 0.13	1 1	08/02/15 15:28 08/02/15 15:28	08/06/15 19:10 08/10/15 10:04		
6020 MET ICPMS	Analytical	Method: EPA 6	020 Prepa	ration Meth	od: EPA	A 3020			
Arsenic Selenium	0.0046 0.0012	mg/L mg/L	0.00050 0.00050	0.00011 0.00020	1 1	08/02/15 15:41 08/02/15 15:41	08/07/15 18:27 08/07/15 18:27		
300.0 IC Anions	Analytical	Method: EPA 3	0.00						
Chloride Fluoride Nitrate as N Sulfate	30.2 0.54 2.8 58.8	mg/L	1.2 0.050 0.10 1.2	0.60 0.0036 0.050 0.60	1 1 1		07/31/15 18:35 07/31/15 18:35 07/31/15 18:35 07/31/15 18:35	16984-48-8 14797-55-8	
350.1 Ammonia	Analytical	Method: EPA 3	350.1						
Nitrogen, Ammonia	ND	mg/L	0.040	0.020	1		08/12/15 16:06	7664-41-7	
Phosphate, Ortho Low Level	Analytical	Method: SM 4	500-P E						
Orthophosphate as P	0.76	mg/L	0.050	0.017	10		07/31/15 17:15		

# REPORT OF LABORATORY ANALYSIS

07/30/15 22:04 14797-55-8

07/30/15 22:04 14808-79-8

08/10/15 10:27 7664-41-7

07/30/15 16:23



## **ANALYTICAL RESULTS**

Project:

Nitrate as N

350.1 Ammonia

Nitrogen, Ammonia

Orthophosphate as P

Phosphate, Ortho Low Level

Sulfate

**FMC RCRA** 

Pace Project No.:

10316268

ND

ND

ND

ND

mg/L

mg/L

mg/L

Analytical Method: SM 4500-P E

mg/L

Analytical Method: EPA 350.1

Sample: 507CDI	Lab ID:	10316268005	Collecte	d: 07/29/15	5 15:25	Received: 07/	30/15 10:00 Ma	atrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical	Method: EPA 6	010 Prepa	ration Meth	od: EPA	A 3010			
Cadmium Potassium	ND 0.28J	mg/L mg/L	0.0030 2.5	0.00065 0.13	1 1	08/01/15 14:53 08/01/15 14:53	08/03/15 01:39 08/03/15 01:39	7440-43-9 7440-09-7	
6020 MET ICPMS	Analytical	Method: EPA 6	020 Prepa	ration Meth	od: EPA	3020			
Arsenic Selenium	ND ND	mg/L mg/L	0.00050 0.00050	0.00011 0.00020	1 1	08/01/15 14:37 08/01/15 14:37	08/07/15 03:56 08/07/15 03:56	7440-38-2 7782-49-2	
300.0 IC Anions	Analytical	Method: EPA 3	0.00						
Chloride Fluoride	ND ND	mg/L mg/L	1.2 0.050	0.60 0.0036	1 1		07/30/15 22:04 07/30/15 22:04	16887-00-6 16984-48-8	

0.10

1.2

0.040

0.0050

0.050

0.60

0.020

0.0017

1

1



# TECHNICAL REVIEW ACTION SUMMARY SDG 10316268

Arsenic

Cadmium

J1, J+1, U1

Potassium

Selenium

J-1

# Phosphorus

If the field is left blank no actions or qualifications were necessary.

J1 - Positive result < PQL is flagged as estimated (J) due to uncertainty at the low level.

J+1 - Positive results <2 PQL are flagged as estimated with the potential for high bias (J+) due to non-compliant CRI stability.

J-1 - Results <2 PQL are flagged as estimated with the potential for low bias (J-) due to non-compliant CRI stability.

U1 - Positive result is flagged as not-detected at the reported value (U) due to blank contamination.





## SAMPLE SUMMARY

Project:

FMC RCRA

Pace Project No.:

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10316268001	507115	Water	07/29/15 12:00	07/30/15 10:00
10316268002	507166	Water	07/29/15 12:40	07/30/15 10:00
10316268003	507113	Water	07/29/15 13:20	07/30/15 10:00
10316268004	507168	Water	07/29/15 14:50	07/30/15 10:00
10316268005	507CDI	Water	07/29/15 15:25	07/30/15 10:00
10316268006	507701	Water	07/29/15 15:40	07/30/15 10:00
10316268007	507104	Water	07/29/15 15:50	07/30/15 10:00
10316268008	507165	Water	07/29/15 17:40	07/31/15 10:00
10316268009	507167	Water	07/29/15 18:20	07/31/15 10:00
10316268010	507158	Water	07/29/15 19:05	07/31/15 10:00
10316268011	507183	Water	07/30/15 08:05	07/31/15 10:00
10316268012	507121A	Water	07/30/15 08:50	07/31/15 10:00
10316268013	507108A	Water	07/30/15 09:30	07/31/15 10:00
10316268014	507123 A,B,C	Water	07/30/15 10:15	07/31/15 10:00
10316268015	507122	Water	07/30/15 11:00	07/31/15 10:00
10316268016	507155	Water	07/30/15 12:00	07/31/15 10:00
10316268017	507156	Water	07/30/15 12:40	07/31/15 10:00
10316268018	507601	Water	07/30/15 13:05	07/31/15 10:00
10316268019	507157 A,B,C	Water	07/30/15 13:30	07/31/15 10:00
10316268020	507BTS	Water	07/30/15 14:00	07/31/15 10:00







Project:

**FMC RCRA** 

Pace Project No.:

10316268

Method:

**EPA 6010** Description: 6010 MET ICP

Client:

**FMC** 

Date:

August 13, 2015

### General Information:

20 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

#### **Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

#### Sample Preparation:

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

# Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

## **Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

#### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

## Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

#### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

## QC Batch: MPRP/56575

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10316058019

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- · MS (Lab ID: 2038938)
  - Potassium
- · MSD (Lab ID: 2038939)
  - Potassium

# QC Batch: MPRP/56634

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10316268014,10316268019

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- · MS (Lab ID: 2038903)
  - Potassium
- · MSD (Lab ID: 2038902)
  - Potassium
- · MSD (Lab ID: 2038904)
  - Potassium

#### **Additional Comments:**

# REPORT OF LABORATORY ANALYSIS

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Project:

FMC RCRA

Pace Project No.:

10316268

Method:

**EPA 6010C** 

Description: 6010C MET ICP

Client:

**FMC** 

Date:

August 13, 2015

### General Information:

4 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

## **Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

## Sample Preparation:

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

## Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

## Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

#### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

# Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

#### **Matrix Spikes**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.





Project:

Pace Project No.:

FMC RCRA 10316268

Method:

EPA 6020

Description: 6020 MET ICPMS

Client:

**FMC** 

Date:

August 13, 2015

#### General Information:

20 samples were analyzed for EPA 6020. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

## **Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

#### Sample Preparation:

The samples were prepared in accordance with EPA 3020 with any exceptions noted below.

## Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

## **Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

## Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

#### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

## Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

## Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.





Project:

FMC RCRA

Pace Project No.:

10316268

Method:

SM 4500F/C

Description: SM4500F-C Fluoride

Client:

**FMC** 

Date:

August 13, 2015

#### **General Information:**

4 samples were analyzed for SM 4500F/C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

## **Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

## Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

## Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

## Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.





Project:

**FMC RCRA** 

Pace Project No.:

10316268

Method:

**EPA 300.0** 

Description: 300.0 IC Anions Client:

**FMC** 

Date:

August 13, 2015

General Information:

20 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:** 

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/24033

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10316058019,10316268001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- · MS (Lab ID: 2036737)
  - Chloride
  - · Fluoride
  - Sulfate
- · MS (Lab ID: 2036739)
  - Chloride
  - · Fluoride
  - Sulfate
- MSD (Lab ID: 2036738)
  - Chloride
  - Fluoride
  - · Sulfate
- · MSD (Lab ID: 2036740)
  - · Chloride
  - Fluoride
  - Sulfate

M6: Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

- · MS (Lab ID: 2036737)
  - · Nitrate as N

## REPORT OF LABORATORY ANALYSIS

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Project:

FMC RCRA

Pace Project No.:

10316268

Method:

EPA 300.0

Description: 300.0 IC Anions

Client:

**FMC** 

Date: Au

: August 13, 2015

QC Batch: WETA/24033

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10316058019,10316268001

M6: Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

- · MSD (Lab ID: 2036738)
  - Nitrate as N

QC Batch: WETA/24059

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10316268014,10316268019

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- · MS (Lab ID: 2039518)
  - · Chloride
  - Fluoride
  - · Nitrate as N
- · MS (Lab ID: 2039520)
  - Chloride
  - · Nitrate as N
  - Sulfate
- MSD (Lab ID: 2039519)
  - Chloride
  - Fluoride
  - Nitrate as N
- MSD (Lab ID: 2039521)
  - Chloride
  - · Nitrate as N
  - Sulfate

M6: Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

- MS (Lab ID: 2039518)
  - Sulfate
- MSD (Lab ID: 2039519)
  - Sulfate





Project:

**FMC RCRA** 

Pace Project No.:

10316268

Method:

EPA 350.1 Description: 350.1 Ammonia

Client:

**FMC** 

Date:

August 13, 2015

### General Information:

20 samples were analyzed for EPA 350.1. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

#### **Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

## Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

#### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

## Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

#### **Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

## Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/24218

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10316268014,10316268019

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- · MSD (Lab ID: 2048408)
  - · Nitrogen, Ammonia





Project:

FMC RCRA

Pace Project No.:

10316268

Method:

SM 4500-P E

Description: Phosphate, Ortho Low Level

Client:

**FMC** 

Date:

August 13, 2015

## **General Information:**

20 samples were analyzed for SM 4500-P E. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

#### **Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

#### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

#### **Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

## Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

#### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

## Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

## QC Batch: WETA/24034

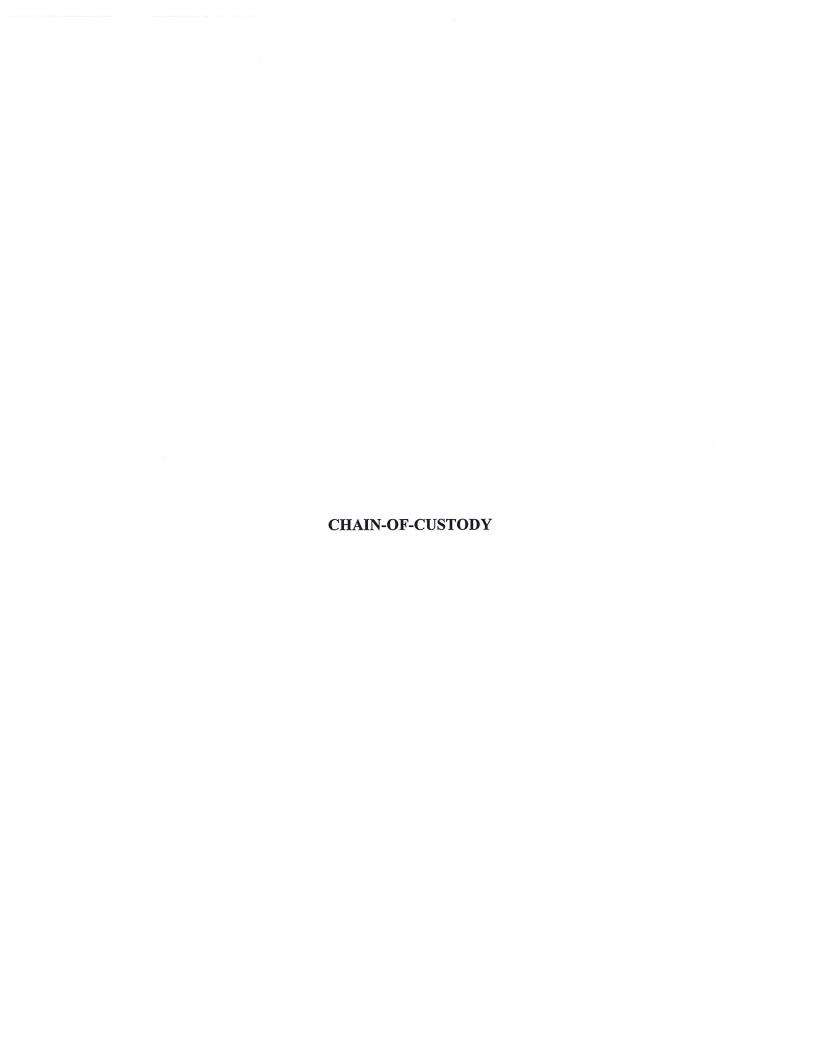
A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10316058011,10316058019

M6: Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

- · MS (Lab ID: 2036822)
  - · Orthophosphate as P
- · MSD (Lab ID: 2036823)
  - · Orthophosphate as P

## **Additional Comments:**

This data package has been reviewed for quality and completeness and is approved for release.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be comploted accurately.

115125-Pace Project No./ Lab I.D. (NIY) DRINKING WATER SAMPLE CONDITIONS 500 OTHER Cooler (Y/N) Sustody Sealer L Received on Ice (YIN) C GROUND WATER 17. Residual.Chlorine (YN) O. ni qmaT Page: REGULATORY AGENCY RCRA Requested Analysis Filtered (Y/N) 1600 TIME STATE Site Location 1/25/15 I NPDES очно Рьоя UST Ammonia L TOTAL PHOS by ICP PO BOX 4111 POCATELLO ID 83202 **E**LUORIDE (ISE) TOTAL METALS 6010 ACCEPTED BY / AFFILIATION OTAL METALS 6020 アロンタ MOD NI ↓Ja9T zizylsnA↓ Ofher Reference:
Pace Project
Manager:
Pace Profile #: 26442 line# 4 Brian McGinnis Methanol Preservatives Na2S2O3 HOBN Company Namo: FMC HCI nvoice Information: HNO3 OSZH Section C ace Quoto ttengon: Address: Unpreserved TIME # OF CONTAINERS M SAMPLER NAME AND SIGNATURE 129/15 SAMPLE TEMP AT COLLECTION PRINT Name of SAMPLER: 12:40 05171 91:11 8:2 15,25 05:51 DATE TIME COMPOSITE Walter Crawel Hydro metrics 7 29 15 DATE COLLECTED Roport To: Ericka Vallance, Hydrometrics RELINQUISHED BY ! AFFILIATION TIME CCMPOSITE Sopy To: Rob Hartman, MWH Bruce Wallin, ECCI DATE Section B Required Project Information: RCRA FMC (G=GRAB C=COMP) ပန္ကိုပ SAMPLE TYPE Ø O ပ O ပ O O O Ø Purchase Order No.: ര Project Number: × ¥ 場を ¥ ¥ M ¥ W (see valid codes to left) ¥ ž ¥ roject Name: MATRIX CODE | Martix Codes | Mart 2809 000 507 COL 507 70 I 70 J 6010; Cadmium, Polassium; 6020; Arsenia, Selenium Total Phas by ICP only an wells 108, 121, 122 & 123 brian meginnis@fmc.com 5071 ADDITIONAL COMMENTS 507 507 507 507 POCATELLO, ID 83202 507 (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE 507 507 507 8691 SAMPLE ID Section D Required Client information PO BOX 4111 WQP: 300.0- CI, SO4, Nilrate, 898 Section A Required Client Information: Requested Due Dato/TAT: ad Ex Air Bil! # Company: Email To: 5 10 hone: 8 -17 H MHLI Page 51 of 57

F-ALL-Q-020rev.08, 12-Oct-2007

MANDENTY: 67 29 (15

accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any involces not paid within 30 days.

\*Important Nate: By signing this form you are

SIGNATURE of SAMPLER:

Pace Analytical Sam		Document Name:			Document Revised: 23Feb2015	
		le Condition Upon Receipt Form  Document No.:		ipt Form	Page 1 of 1	
			nt No.: 3-rev.13		Issuing Authority:	
<del> </del>			3-164.13		Pace Minnesota Quality Office	
ample Condition Client Name:	1 mm 4 s 4 s 4 s 4 s 4 s 4 s 4 s 4 s 4 s		Project	#: WO	#:10316268	
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Commercial Pace SpeeDee Tracking Number: 5058 1698 608	Other:	·		1031	6268	
Custody Seal on Cooler/Box Present? Pres No.	3	Seals In	tact? {	Tes ONO	Optional: Proj. Due Date: Proj. Name:	
Packing Material: Bubble Wrap Bubble Bags		ie 🗌	Other:		Temp Blank? Yes No	
hermometer B88A9130516413 B88A91216750 Used: B88A01433100		e of Ice:	1 We	Blue	None Samples on ice, cooling process has begun	
ooler Temp Read (°C): 0.72.3 Cooler Temp Co	rected (°C	): ().	12.3	Bi	ological Tissue Frozen? Yes No N/A	
emp should be above freezing to 6°C Correction Fact		Ve		e and Initials o	of Person Examining Contents: - The 1/30	
SDA Regulated Soil ( N/A, water sample)					Jm7/20/15	
d samples originate in a quarantine zone within the United S, NC, NM, NY, OK, OR, SC, TN, TX or WA (check maps)?	States: AL,	AR, AZ, C	A, FL, GA, □Yes		d samples originate from a foreign source (internationally,	
If Yes to either question, fill out a Reg	ulated Soi	l Checkli	st (F-MN-	Q-338) and in	Cluding Hawaii and Puerto Rico)?   Yes   No  Clude with SCUR/COC paperwork.	
					COMMENTS:	
Chain of Custody Present?	- Tes	□No	□N/A	1.	CONTINUE	
hain of Custody Filled Out?	Yes	□No	□N/A	2.		
hain of Custody Relinquished?	Yes	□No	□N/A	3.		
Sampler Name and/or Signature on COC?		□No	□N/A	4.		
amples Arrived within Hold Time?	L Yes					
1.11	a (See)	No_	□N/A	6. Oithi	Dace	
Short Hold Time Analysis (<72 hr)?		UNO	□N/A		1 Vies	
Rush Turn Around Time Requested?	Yes	[]to	□N/A	7.		
Sufficient Volume?		□No	□N/A	8.		
Correct Containers Used?		□No	□N/A	.9.	* ,	
-Pace Containers Used?	Ves	□No	□N/A			
Containers Intact?	Yes	No	□N/A	10.7/20/15		
iltered Volume Received for Dissolved Tests?	FYes	□No	-DN/A	11. Note if s	sediment is visible in the dissolved container	
ample Labels Match COC?	Wyes	□No	□N/A	12.	,	
-Includes Date/Time/ID/Analysis Matrix: WT					* .	
All containers needing acid/base preservation have been checked? All containers needing preservation are found to be in	<b>₽</b> Yes	□No	□n/a	13. Sample #−	HNO₃ 1/1	
compliance with EPA recommendation? (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , HCl<2; NaOH >9 Sulfide, NaOH>12 Cyanide) Exceptions: VOA, Coliform, TOC, Oll and Grease,	Ves	□No	□N/A	Initial when	Lot # of added	
DRO/8015 (water) DOC	□Yes	□No	IN/A	completed:	: preservative:	
leadspace in VOA Vials ( >6mm)?	□Yes	□No	ANA	14.		
rip Blank Present?	☐Yes	□No	□N/A.	15.		
rip Blank Custody Seals Present?	□Yes	□No	DNIA			
ace Trip Blank Lot # (if purchased):	<del></del>					
CLIENT NOTIFICATION/RESOLUTION				2417 104	Field Data Required? Yes No	
Person Contacted:				Date/Time:		
Comments/Resolution:					3	
		***************************************				
	7					
	1 3					